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REMARKS

Claims 1-3, 69-79, and 91-99 had been cancelled. In this Amendment, claims 14-68 and 80-90 have been cancelled. New claims 100-125 have been added. Claims 100-125 remain in the application. No new matter has been added. Reexamination and reconsideration of new claims 100-125 is respectfully requested in view of the remarks that follow.

Claim Rejections – 35 USC 101

In section 3, claims 14-68 were rejected under 35 USC 101 as being directed to non-statutory subject matter. This rejection has been rendered moot with the cancellation of these claims.

Claim Rejections - 35 U.S.C. § 102

In section 4, claims 14-68 and 80-90 were rejected under 35 U.S.C. 102(b) as being anticipated by Hovland et al, U.S. Patent No. 6,015,393 (hereinafter "Hovland").

In an effort to move prosecution forward, claims 14-68 and 80-90 have been cancelled, rendering this rejection moot. New claims 100-125 have been added that clarify the novel aspects of the invention. For example, new independent claim 100 is drawn to a system for the detection of stroke in a patient. The system includes, among other things, electrodes being positioned on a skull of the subject to apply the current and to receive brain activity of the subject; an A/D converter configured to record the brain activity of the subject in the form of spectral electrical impedance tomography recordings and electroencephalography recordings, simultaneously; and a computer system configured to generate real time spectral electrical impedance data from the spectral electrical impedance tomography recordings, the spectral electrical impedance data indicating an impedance change within the brain of the subject, wherein the impedance change is associated with an indication of stroke.

New independent claims 110, 111 and 124 have also been added. Claims 110 and 111 are similar to claim 100, except for example, claim 111 is drawn to a method for detecting stroke in a patient. Claim 124 is drawn to a system for detecting a medical problem affecting the brain. No new matter was added. Support for the new claims may

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be found in the claims as filed, and at least in paragraphs 0008, 0010, 0024, and 0029,

for example.

Hovland is directed to a system and method for monitoring and evaluating penile

tumescence. The system of Hovland includes a plurality of sensing elements that are

place on the penis for sensing penile impedance values (see Abstract). Hovland

teaches providing an AC current at a single frequency (see Col. 9, lines 40-44) to the

electrodes and for measuring an impedance.

In addition, Hovland fails to teach a system that measures more than one type of

signal at the same time to gather information related to potentially different medical

problems. Hovland applies a single signal in an attempt to gather data useful for

determining the etiology of erectile dysfunction.

As always, the Examiner is invited to contact the undersigned at the telephone

number appearing below, if it is believed that such would aid in furthering the

prosecution of the present application.

Applicant believes the currently pending set of claims recites patentable

subject matter and allowance of the same is requested.

No fees are believed due for filing this amendment, however, please charge any

fees that may be due, or credit any overpayment, to Deposit Account No. 17-0055.

Respectfully submitted,

GIORGIO BONMASSAR, ET AL.

Dated: December 21, 2010

/Thomas J. Krumenacher/

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